CLAIMS

What is claimed is:

1. An active noise control system for reducing an undesirable noise, comprising:

a noise detector for deriving an input signal representative of the undesirable noise;

an interfering wave signal generator for processing the input signal to produce an interfering wave signal for generating a noise canceling wave;

a limiting amplifier having a specified output signal amplitude threshold, for outputting amplified interfering wave signal having an amplitude equal to or less than the specified output signal amplitude threshold; and

an electrical acoustic converter for propagating the noise canceling wave.

2. An active noise control system for reducing an undesirable noise, comprising:

a noise detector for deriving an input signal representative of the undesirable noise;

a limiting amplifier having a specified output signal amplitude threshold, for outputting amplified input signal having an amplitude equal to or less than the specified output signal amplitude threshold;

an interfering wave signal generator for processing the

amplified input signal to produce an interfering wave signal for generating a noise canceling wave; and

an electrical acoustic converter for propagating the noise canceling wave.

3. An active noise control system for reducing an undesirable noise, comprising:

a noise detector for deriving an input signal representative of the undesirable noise;

a limiter having a specified output signal threshold, for outputting the input signal having an amplitude equal to or less than the specified output signal threshold;

an interfering wave signal generator for processing the input signal to produce an interfering wave signal for generating a noise canceling wave;

an amplifier for outputting amplified interfering wave signal; and

an electrical acoustic converter for propagating the noise canceling wave.

4. An active noise control system for reducing an undesirable noise, comprising:

a noise detector for deriving an input signal representative of the undesirable noise;

an amplifier for outputting amplified input signal;

an interfering wave signal generator for processing the amplified input signal to produce an interfering wave signal for generating a noise canceling wave;

a limiter having a specified output signal threshold, for outputting the interfering wave signal having an amplitude equal to or less than the specified output signal threshold; and

an electrical acoustic converter for propagating the noise canceling wave.

5. An active noise control system for reducing an undesirable noise, comprising:

a noise detector for deriving an input signal representative of the undesirable noise;

a digital filter for processing A/D converted input signal to produce an interfering wave signal for generating a noise canceling wave;

a limiting amplifier having a specified output signal amplitude threshold, for outputting D/A converted, amplified interfering wave signal having an amplitude equal to or less than the specified output signal amplitude threshold; and

an electrical acoustic converter for propagating the noise canceling wave.